PART 3
Ambient Air Quality Standards

REGULATION 3.01 Ambient Air Quality Standards

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control
Pursuant To: KRS Chapter 77 Air Pollution Control
Necessity And Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation establishes ambient air quality standards, the methods for measuring air contaminants, and the intention of the Board to prohibit further significant and avoidable deterioration of air quality.

SECTION 1 Definitions
Terms used in this regulation that are not defined in this regulation shall have the meaning given them in Regulation 1.02 *Definitions*.

SECTION 2Purpose
The purpose of an ambient air quality standard is to establish a concentration, including a time-averaging interval over which that concentration is measured, for a particular air contaminant that the Board determines is necessary, with an adequate margin of safety, to protect public health and welfare from any known or anticipated adverse effect of that air contaminant.

SECTION 3Non-degradation Intention
In establishing an ambient air quality standard, it is the intention of the Board to prohibit further significant and avoidable deterioration of air quality in areas where the air quality is presently numerically equal to or better than the standard.

SECTION 4General Prohibition
A person shall not cause or allow the emission of an air contaminant that would violate, or interfere with the attainment or maintenance of, an ambient air quality standard.

SECTION 5 Ambient Air Quality Standards

	Air Contaminant	Primary Standards	Averaging Times	Secondary Standards
5.1 5.1.1 5.1.2	**Carbon Monoxide**	9 ppm (10 mg/m^3)	8-hour[1]	None
		35 ppm (40 mg/m^3)	1-hour[1]	None
5.2	**Lead**	1.5 µg/m^3	Quarterly Average	Same as Primary
5.3	**Nitrogen Dioxide**	0.053 ppm (100 µg/m^3)	Annual (Arithmetic Mean)	Same as Primary
5.4 5.4.1	**Particulate Matter (PM_{10})**	50 µg/m^3	Annual[2] (Arithmetic Mean)	Same as Primary
5.4.2		150 µg/m^3	24-hour[7]	
5.5 5.5.1	**Particulate Matter ($PM_{2.5}$)**	15 µg/m^3	Annual[3] (Arithmetic Mean)	Same as Primary
5.5.2		65 µg/m^3	24-hour[4]	
5.6 5.6.1	**Ozone**	0.08 ppm	8-hour[5]	Same as Primary
5.6.2		0.12 ppm	1-hour[6]	Same as Primary
5.7 5.7.1	**Sulfur Oxides**	0.03 ppm	Annual (Arithmetic Mean)	
5.7.2		0.14 ppm	24-hour[1]	
5.7.3			3-hour[1]	0.5 ppm (1300 µg/m^3)
5.8	**Hydrogen Sulfide**		Maximum 1-hour average	14 µg/$m^{3,\ 1}$

	Air Contaminant	Primary Standards	Averaging Times	Secondary Standards
5.9	**Gaseous Fluorides**			
5.9.1	**(expressed as HF)**	400 μg/m^3	Annual arithmetic mean	
5.9.2			Maximum 1-month average	0.82 μg/m^3
5.9.3			Maximum 1-week average	1.64 μg/m^3
5.9.4		800 μg/m^3	Maximum 24-hour average	2.86 μg/m^3
5.9.5			Maximum 12-hour average	3.68 μg/m^3
5.10	**Total Fluorides**[8]			
5.10.1			Growing season[9]	40 ppm (w/w)
5.10.2			2-month average	60 ppm (w/w)
5.10.3			1-month average	80 ppm (w/w)

1 Not to be exceeded more than once per year.

2 To attain this standard, the expected annual arithmetic mean PM_{10} concentration at each monitor within an area must not exceed 50 μg/m^3.

3 To attain this standard, the 3-year average of the annual arithmetic mean $PM_{2.5}$ concentrations from single or multiple community-oriented monitors must not exceed 15 μg/m^3.

4 To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 65 μg/m^3.

5 To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.

6 The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is ≤ 1, as determined by 40 CFR Part 50 Appendix H. The 1-hour ozone standard shall be in effect until June 15, 2005.

7 To attain this standard, the 3-year average of the annual 99th percentile values at each monitoring site must not exceed 150 μg/m^3.

8 Dry weight basis (as fluoride ion) in and on forage for consumption by grazing ruminants.

9 Average concentration of monthly samples over growing season (not to exceed 6 consecutive months).

SECTION 6 Applicability of Ambient Air Quality Standards

The ambient air quality standards shall apply, be achieved, and maintained in Jefferson County, Kentucky.

SECTION 7 Methods of Measurement

The air contaminants listed in sections 5.1 to 5.7 shall be measured by the reference or equivalent methods and at the frequency specified in EPA regulations on Ambient Air Quality Surveillance (40 CFR Parts 50, 53, and 58).

SECTION 8 Savings Clause

Any emission standard established pursuant to Regulation 3.04 *Ambient Air Quality Standards* section 1.7, 2.7, 2.8, or 2.9 that is reflected in a permit condition as of July 1, 2005, shall remain in effect until replaced with an emission standard established pursuant to Regulation 5.21.

Adopted v1/4-19-72; effective 4-19-72; amended v2/9-1-76, v3/6-13-79, v4/6-21-05 effective 7-1-05.